

### REMARKS

The specification and abstract have been amended to correct the typographical and clerical errors kindly pointed out in the Office Action and to list new Figure 64 in the "Brief Description of Drawings". One sheet of new drawing is submitted to add Figure 64 illustrating the floating dry dock recited in Claim 14, as required by the Action. Page 51 of the specification has been amended to describe the dry dock briefly. Page 63 has been amended to point out the illustration of bridge module 776 (objected to in the Action as missing in the drawing) in Figure 57.

Claims 6, 7, 15, 18 and 20 have been amended to present patentable subject matter kindly pointed out in the Action. Claims 8 to 13, 16 and 17, also pointed out as allowable, are now dependent upon the above amended claims and are also thereby deemed allowable. Claims 21 through 24 have been amended to depend from Claim 20, amended above to allowable form. Claim 3 has been canceled and the box materials incorporated into Claim 2 for consolidation purposes, with the dependencies of Claims 4 and 5 amended accordingly. New Claims 25 to 27 have been added to recite embodiments in which the midsection of floating boxes (or a floating drydock) is actually incorporated into the vessel. No new matter is believed to be introduced by any of these amendments.

### PREFERRED FIGURE FOR ISSUED PATENT

The publication of the present application printed Figure 5, which pertains to seawall structures constructed of components which may be transported by the ships presently disclosed and claimed. In accordance with MPEP 1302.09, it is respectfully requested that either Figure 57 or 44 be designated for printing in the *Official Gazette* and on the face of the patent as more

representative of the claimed invention.

#### REJECTION UNDER 35 U.S.C. 112

The rejection of Claim 14 under 35 U.S.C. 112, first paragraph, is respectfully traversed. It is respectfully submitted that a "floating dry dock" is a commonplace vessel of long history as well known to those in the maritime field as, e.g. a barge or tugboat. Applicant has provided a new drawing (Figure 64) prepared from a photograph of an actual floating dry dock of basic design to meet the requirement of 37 C.F.R. 1.83(a), with brief disclosure thereof added to page 51. Applicant has also provided the attached Exhibits A and B, an article from *Towline* relating an operation of towing a floating dry dock from China to Maine, and an entry from the *Encyclopedia Americana International Edition (1972)* providing a succinct definition: "a floating dry dock is a buoyant structure that can be lowered and raised in the water to receive and lift a ship." The encyclopedia article describes the basic components and operation of a floating dry dock. Both the article and encyclopedia excerpt provide photos of floating dry docks.

The *Towline* article illustrates the potential difficulty of towing such a vessel, with high freeboard and considerable sail area, over long distances with unpredictable weather, and thus highlights the advantages of the present invention as discussed on page 51, lines 19-23. By incorporating a floating dry dock as the midship section of a vessel of the present invention, it can be transported faster and with better control. It is respectfully submitted that those skilled in the art would be enabled to construct or obtain floating dry docks as needed to incorporate in the vessel as claimed, from the extensive history and documentation of floating dry docks in the maritime literature.

Also attached as Exhibit C is a copy of pages 358 and 359 (Chapt. 26) of the current edition of *Ships and Aircraft of the U.S. Fleet* (U.S. Naval Institute 2005), which book series was cited at page 51, lines 17-19 of the application for disclosures of floating dry docks and other naval vessels. This page illustrates and describes two separate U.S. Navy floating dry docks. A photocopy of a floating dry dock was also submitted with the IDS as item A on page 3 of the IDS.

As to the incorporation of the dry dock as the midship section of the vessel, mechanical attachment means are recited in Claim 1 for incorporating the dry dock like any other "floating object". Particulars of suitable mechanical attachments for securing the midship section in place are discussed in the application at pages 49 to 51. It is therefore respectfully submitted that all rejections of Claim 14 under 35 U.S.C. 112 should be withdrawn and the claim examined on its merits.

#### ANTICIPATION REJECTIONS

The rejections of Claims 19, 21, 23 and 24 under 35 U.S.C. 102(b) over WO 90/08059 are respectfully traversed. The Action alleges that figures 5 and 6 of this reference disclose "a vessel comprising what can be considered to be separable bow, stern and midship sections, ... of precast concrete boxes having hexagonal or half-hexagonal cross-sections..." and that "it is considered that a portion of said boxes ... are adapted to serve as tanks ... [and] for special purposes comprising operations, habitability and weapons, and ... said midship section is large enough ... to serve as a mobile base ...". Mention is made of "intended uses of the boxes," but the context is unclear. The Action further states the "boxes ... due to their hollowness are capable of serving as tanks ... and because of their flat upper deck are capable of being used for [a variety of] special

purposes." Claim 20 has been amended as suggested to be allowable, and Claims 21, 23 and 24 made dependent thereon; therefore, only Claim 19 is traversed here.

It is respectfully submitted that WO 90/08059 neither discloses nor suggests a platform or vessel comprising separable bow, midship and stern sections as claimed. Figures 5 and 6 depict a generally rectangular platform (with irregular edges due to the use of only hexagonal modules) without any delineation or suggestion of bow, stern or separation points. No half-hexagonal modules are present as recited in Claim 19. Furthermore, this publication teaches against such an invention in several portions (See, e.g. paragraph bridging pages 3/4 and second full paragraph on page 4) that the modules are fastened permanently at the vertices to form a stiff, monolithic structure with no defined forward or after portions. There is no suggestion whatever of separating any section or module once joined to form the structure. Although irrelevant to Claim 19, the publication's modules are unsuitable for any function but buoyancy or tanks due to their permanent reinforcements extending between their vertices. It is therefore respectfully requested that this rejection be withdrawn.

#### OBVIOUSNESS REJECTIONS

The rejection of Claim 22 under 35 U.S.C. 103(a) over WO 90/08059 in view of Gainsley's U.S. Patent No.3,557,742, (Hereinafter "Gainsley") is respectfully traversed. Claim 22 is now dependent upon allowable Claim 20, and should thus be considered allowable *per se*. Perhaps surprisingly, despite the references in WO90/08059 to forming some sort of "base" or floating platform for various purposes, there is not a hint of mounting equipment such as cranes thereon, not even for emplacing the anchors shown in Figure 7. Furthermore, this publication

does not disclose or suggest a self-propelled unit with the appurtenant structures recited in Claim 20. It is therefore respectfully submitted that there is insufficient suggestion or motivation to incorporate features such as cranes from the self-propelled unit of Gainsley into the monolithic platforms of the publication or to apply the hexagonal modular assembly of the publication to Gainsley. This rejection should therefore be withdrawn.

The rejections of Claims 1 to 3, 5 and 14 under 35 U.S.C. 103(a) over Garcia's U.S. Patent No. 3,878,806 (Hereinafter "Garcia") in view of Winslow's U.S. Patent No. 2,981,219 (Hereinafter "Winslow"), Smith's U.S. Patent No. 2,369,615 (Hereinafter "Smith") and Gainsley are respectfully traversed. Due to the number of references cited, these rejections appear to be based upon improper hindsight and a catalog of marine hardware. The Action states that Garcia discloses "a self-propelled vessel for transporting floating objects, comprising separate bow 10 and stern 12 sections ... to form a vessel incorporating ... floating object as a midship section ....., " but does not disclose [Applicant's] "bow section comprising at least one anchor, propulsion means" *et al.* Winslow is cited for an anchor, Smith allegedly for bow propulsion means and "inherently present [bow] power supply means" and Gainsley for a bow crane. The Action concludes that it would have been obvious to add to Garcia's bow section an anchor (Winslow), propulsion means, etc. of Smith and Gainsley's crane.

The motivation is said to be making Garcia's bow section independently operable as in Smith. Similarly, although Garcia does not disclose a stern anchor, it is allegedly obvious to add one to allow independent operation of the stern section. Garcia is further cited for the incorporation "as said midship section

an assemblage of floating boxes 14 ... mechanically secured together." Garcia is also "considered ... adapted to incorporate as the midship section a floating drydock," allegedly "an intended use of the midsection". The action alleged that "the midsection itself can be used as a floating drydock."

As admitted in the Action, Garcia discloses a vessel with separable bow, stern and midship sections, but neither discloses nor suggests any of the features of the bow section claimed by Applicant. The remaining references are applied to suggest the addition of these features, one by one. Gainsley discloses "a cargo vessel in the form of an oceangoing barge comprising a cargo-carrying hull 1 with a propulsion unit 2 detachably secured to the after end thereof." (Column 1, lines 44-47) The vessel has a bow 3 and holds 4, all of which are components of the barge hull. This is a classic barge with a pusher propulsion unit which mates to the after end. The forward crane 6 is not attached to a detachable bow unit, but adjacent one of the holds, thus cannot suggest the crane included in the bow unit claimed by Applicant any more than a crane installed anywhere else, afloat or ashore. Gainsley states in Column 5, lines 36-44 that multiple interlockable hull sections could be used with such a propulsion unit, but this is hardly an enabling disclosure of this concept. Winslow discloses a 1957-vintage "safety anchor," but there is no suggestion that it would find use in a detachable bow unit, and no suggestion or motivation in Garcia to provide either the bow or stern sections with such equipment.

Smith discloses a WW II-era "sectional vessel" with separable bow, stern and cargo sections which can be constructed or stored anywhere, then mated to form a vessel of suitable dimensions and capabilities. Although the Action refers to the "propulsion means 20, 23 in the bow section of Smith" and "inherently present power supply and control means" therein, bow

section 1 as shown in Figure 1 is actually the only section of the vessel not having propulsion means, although steering gear may be provided (Column 2, lines 33-36). The stern and each of the cargo sections are provided with propulsion, but although the first full paragraph of column 3 (page 2) states that "each of the sections may be propelled ...," due to the lack of disclosure of bow unit propulsion, Applicant respectfully submits that this statement refers to the bow and cargo sections only. Therefore, although Smith's bow section might contain steering gear and the power to operate same, it lacks propulsion and the ability to be "independently operable".

Since Smith neither employs nor suggests any cranes and Gainsley's crane is not actually on a bow section, there is no suggestion or motivation to emplace a crane on the bow of Smith's vessel, especially considering the construction and apparent low freeboard of this vessel. While both Garcia's and Smith's stern sections have propulsion and controls, neither have a stern anchor (See column 2, lines 39-48.), and the disclosure of anchors by Winslow (among thousands of sources) does not provide suggestion or motivation for installing a stern anchor on a separable, self-propelled stern section as claimed by Applicant. Although the Action states that Garcia's boxes "comprise at least one material selected from the group consisting of concrete, metal, wood, plastic and polymeric composites," Applicant's Attorney finds no mention whatever of materials for the boxes themselves; therefore, there is certainly no suggestion or motivation to use floating boxes of the materials presently claimed.

In view of the above discussion, it is respectfully that this rejection should be withdrawn as to Claims 1 to 3 and 5.

The Action claims with regard to Claim 14 that Garcia's vessel "is considered to be adapted to incorporate as the midship

section a floating drydock," since [using] "the midship section ... is an intended use of the midsection ..." The Action further alleges that since "the midsection of Garcia can perform this intended use, Garcia makes this claim unpatentable," and also that "the midsection itself can be used as a floating drydock if a small watercraft is placed upon its upper deck for repair." It is respectfully submitted that Garcia provides no disclosure or suggestion of midsections other than cargo units, nor mention of floating drydocks. Applicant's Attorney finds no language supporting the "intended use" of Garcia's midsections as a floating drydock; in fact, due to the manner in which the midsection components are joined by sliding together laterally, it is hard to envision how one could be lowered in the water to take on another floating vessel.

It is hoped that the extensive discussion above, plus Exhibits A, B and C, have made it clear that a floating drydock is a well known and established type of vessel which differs drastically from a barge or cargo section which lacks the capability of floating a vessel aboard for drydocking. Hoisting a vessel aboard a flat-topped hull (or even onto a pier, wharf or the like) is not equivalent to drydocking. Even heavy lift vessels which can submerge sufficiently to take aboard other vessels on a flat upper deck for transport (e.g., the ship which transported the damaged Navy destroyer *USS Cole* back to the U.S.) cannot be considered a floating dry dock, as they do not meet the commonly accepted definition of same and lack the equipment to mount another vessel in position for repairs. Applicant's claimed vessel provides specific advantages in transporting floating drydocks, as discussed above under 35 U.S.C. 112.

It is therefore respectfully submitted that the references cited do not suggest the claimed vessel adapted to incorporate a floating drydock as the midship section, nor a vessel actually



incorporating same (new Claim 27).

The rejection of Claim 4 under 35 U.S.C. 103(a) over Garcia, Winslow, Smith and Gainsley as applied to Claim 3, and further in view of "Cuenci" is respectfully traversed. The only patent not already cited which is listed on the PTO-892 is Hull's U.S. 2,390,940, directed to a "cabling strap". It appears that Hull was inadvertently substituted for Cuenci. Applicant's Attorney has made an unsuccessful search for a patent in the name of "Cuenci," and elects to complete this response without the benefit of the missing reference to advance prosecution. Although Garcia is admitted not to disclose the boxes as precast concrete (in contradiction to the paragraph bridging pages 8 and 9 of the Action), "Cuenci's" disclosure of concrete construction of ships, barges and floating boxes of precast concrete is alleged to render this claim obvious. Motivation to make the boxes 14 of Garcia of precast concrete is said to be "found in the first column of page 1 of Garcia". Clarification of this alleged motivation is respectfully requested, as Applicant's Attorney finds no statement reflecting such motivation in the cited column, and as discussed above, Garcia does not specify or suggest appropriate materials for the boxes. Since precast concrete has been widely used in marine architecture from WW II until the present, it is respectfully submitted that Cuenci could add little to this record (much like the anchor patent above); to overcome the arguments presented above against the rejection of Claim 3 Now combined with Claims 2). Thus, it is respectfully submitted Applicant's claimed use and transport of assemblages of floating precast concrete boxes in the vessel claimed is unobvious. Their transport as a midship section of a vessel as disclosed and claimed and discussed above is a particularly innovative feature of the present invention. As argued above,

the application of the four other references to Claim 3 lacks the required suggestion or motivation, and adding Cuenci's disclosures re precast concrete, however explicit, could add little to a weak foundation. It is therefore respectfully submitted that this rejection should be withdrawn.

It is respectfully submitted that the claims as presented are in full condition for allowance, which action is earnestly requested. If any detail or issue remains unresolved, the Examiner is respectfully invited to contact Applicant's undersigned Attorney so that the matter may be promptly resolved in a telephone interview. This Amendment is timely filed on March 7, the first working day after the due date of March 6.

A credit card authorization for \$350 is attached in payment of the fee for three (3) additional independent claims and two (2) additional total claims. An extra copy of this page is attached for processing.

Respectfully submitted,



James K. Poole

Registration No.: 30,676

P. O. Box 925  
Loveland, CO 80539  
(970) 472-5061  
FAX: (970) 472-5041

Attachments: Exhibits A, B and C; New Figure 64, Credit card authorization